SUSTAINABLE SUPPLY CHAINS: THE SOURCE OF OUR ETHICS

Melissa S. Fu

TC 660H
Plan II Honors Program
The University of Texas at Austin

May 10, 2019

Christopher J. Burke, Ph.D.
McCombs School of Business
Supervising Professor

Martin W. Kevorkian, Ph.D.
English Department
Second Reader

ABSTRACT

Author: Melissa S. Fu

Title: Sustainable Supply Chains: The Source of Our Ethics

Supervising Professor: Christopher J. Burke, Ph.D.

The paper, broadly, explores ethical sourcing, meaning the environmental, economic, and societal impacts considered in a company's sourcing process or value chain. Recently, the topic has gained traction and an influx of research, seen in the increased release of research articles and the increased purchasing of ethically-sourced products. Companies currently face significant external pressures from NGOs and customers to adapt to the changing sustainability landscape, but many are unsure of where to start.

I will first address whether ethical sourcing is important to customers and companies before analyzing six case studies from the coffee, apparel, and technology industries. From the cases, I will evaluate whether companies can produce sustainable products at a fair price to consumers and have tangible impact on the environment and society. By assessing commonalities among the case studies, I will recommend key success factors applicable to a wide range of companies seeking to implement ethical sourcing initiatives.

ACKNOWLEDGEMENTS

First and foremost, I would like to thank the Plan II Honors Program at The University of Texas at Austin for the opportunity to complete research as an undergraduate student. Writing my thesis was an enlightening and exciting learning experience that felt like a culmination of my undergraduate education. Special thanks to the Plan II Office and Staff for their support.

I would also like to thank my Supervising Professor, Dr. Christopher Burke, and my Second Reader, Dr. Martin Kevorkian, for their support throughout the process. Their patience, guidance, and encouragement were vital for the completion of my thesis, and I am immensely grateful. Special thanks to Dr. Michael Hasler for piquing my interest in supply chains in his study abroad program and starting this thesis with me. I have so enjoyed collaborating with these professors.

And finally, thank you to my family and friends for supporting me in my thesis and in life!

TABLE OF CONTENTS

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Besides the National Football League's (NFL) deflate-gate controversy, claiming that quarterback Tom Brady asked for deflated footballs used in the New England Patriots' win over the Indianapolis Colts, footballs have received little attention compared to the culminating championship game, the Super Bowl, which consistently has over 100 million global viewers. How does a cow become a football? And what's good enough for the NFL Super Bowl?

The journey, as seen in *Figure 1*, begins on a cattle ranch, often in Texas, Kansas, or Nebraska, where families devotedly feed, water, and care for their cattle before sending it to the butcher shop. There, workers separate the hide, ensuring that it is even and that there are no nicks or scores, which would immediately disqualify the leather from becoming a football. After, the hides are shipped to a tannery, where they undergo a three-week process of tanning, sorting, embossing with Wilson W's, and spray painting to the deep reddish-brown color of NFL footballs. At this point, Wilson Sporting Goods, the official football producer for the NFL, takes over. In Wilson's factories, the hide passes through the hands of two dozen people—cutters, stampers, stitchers, turners, lacers, molders, inspectors, and packagers—in just three to five days to become a potentially NFL-worthy football (Kahler, 2019).

Figure 1: Supply Chain of a Super Bowl Football

Now, the newly-made football must endure a rigorous selection process before seeing the Super Bowl stadium. After the footballs are inflated to 13 pounds per square inch (PSI), flaws that may have been overlooked beforehand are exposed, allowing the balls to be sorted into three categories: "game use, practice use (balls with slight cosmetic defects), or retail" (Kahler, 2019). For the Super Bowl, the company sends 108 footballs to both teams, specifically made for the championship game. The two teams are then able to select and present 24 balls (12 for play and 12 for backup) to the officials for approval before kickoff. Generally, teams will never use their backups, so to be one of the 12 footballs chosen from the 108 that have already been through Wilson's strict inspection process is an incredible feat (Kahler, 2019).

This process of tracing how a cow becomes a football represents a business phenomenon that impacts any product: ethical sourcing. Just as we examined each step of the football's supply chain to understand whether it meets Super Bowl standards, ethical sourcing requires investigation in a product's supply chain to analyze whether it meets ethical sourcing standards. In this chapter, I will define ethical sourcing and its origins and assess the current situation, including key stakeholders and the current ethical framework. The next chapter takes a deeper dive into the current situation, looking at the company and consumer positions on ethical sourcing and its importance, which will reveal the complexities of company and consumer relationships in the ethical sourcing movement. I will then analyze six companies in three different industries, coffee, apparel, and technology, to draw insights into their successes and failures.

Background and History

Definitions

"Fair trade," "ethically sourced," "responsibly sourced," and "sustainably sourced" are just some of the ways companies label their products to distinguish them as more ethical than a competitor'. These terms are often used interchangeably without clear definitions, causing confusion among consumers about what they are really buying. Because this will be important to understanding later chapters, here are the definitions of some commonly used terms:

- Fair trade
    - Defined by Fairtrade Labelling Organizations International (FLO) as "a trading partnership, based on dialogue, transparency and respect, that seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers and workers" (Warrier, 2011).
- Sustainability
    - Producing with the 3 Ps: profit, planet, and people (Chen, 2014)
    - Defined by Brundtland as "development that meets the needs of the present without compromising the ability of future generations to meet their own" (Warrier, 2011)
    - Defined by Dyllick and Hockerts as managing 3 different types of capital—economic, natural, and social (Chen, 2014)
- Sustainable sourcing and supply management (used interchangeably with ethical sourcing and responsible sourcing)

    - Defined by Akhavan as “all aspects of the upstream component of the supply chain to maximize triple bottom line performance” (Akhavan, 2017)
    - Defined by Carter and Rogers as “the strategic, transparent integration and achievement of an organization’s social, environmental, and economic goals in the systemic coordination of key inter-organizational business processes for improving the long-term economic performance of the individual company and its supply chains” (Chen, 2014)

Beyond these terms, companies label their products with various certifications, such as:

- Fair Trade Certified: indicates that the product complies with standards set by Transfair USA (now Fair Trade USA)
    - What it means: Workers are guaranteed above commodity prices. It also indicates some environmental protections.
    - What it doesn’t mean: That the product was produced on a small farm versus a large plantation. Also, that companies without the certification are unfair to workers or farmers (McLaughlin, 2004).
- Fairtrade Certified: indicates that the product complies with standards set by Fairtrade Labelling Organizations International (FLO)
    - What it means: Workers are guaranteed above commodity prices, particularly focusing on small farmers and cooperatives.
    - What it doesn’t mean: That principles are applied consistently across products. Also, that companies without the certification are unfair to workers or farmers (McLaughlin, 2004).
- Fairly Traded: an unofficial and uncertified term

    - What it means: That the company believes it was fair to the workers.
    - What it doesn't mean: It doesn't actually mean anything since any company can say their products are "fairly traded" (McLaughlin, 2004).
- Rainforest Alliance Certified: indicates that the product complies with standards set by the Rainforest Alliance, a New York-based non-profit dedicated to protecting biodiversity.
    - What it means: That the Rainforest Alliance examined the farm or production site for environmental conditions and fairness to workers.
    - What it doesn't mean: That workers received more than minimum wage in their countries (McLaughlin, 2004).
- Certified Sustainable: indicates that the product complies with standards of various nonprofits and is also often used to indicate Rainforest Alliance Certified products.
    - What it means: That production aimed to protect the environment, treat workers well, and benefit the local community.
    - What it doesn't mean: That they meet one standard set of practices, since nonprofits and other organizations can define "sustainable" in different ways (McLaughlin, 2004).
- Sustainable: an unofficial, uncertified term.
    - What it means: That products are made in a way that is profitable, environmentally sound and beneficial for local communities.
    - What it doesn't mean: It doesn't really mean or guarantee anything (McLaughlin, 2004).

- Certified B Corporation: indicates that the company's overall impact achieved a minimum verified score on the non-profit B-Lab's B Impact Assessment.
    - What it means: That the company, not just the product or service, meets standards of social and environmental performance, public transparency, and legal accountability.
    - What it doesn't mean: It is not legally a benefit corporation and is not a requirement to becoming a benefit corporation (Vote Every Day, 2019).

Rise in the 1990s

The fair trade movement first began in Europe as student organizations and NGOs criticized international corporations, and it eventually gained traction in the United States. It picked up momentum in the 1970s as it started with typical commodities, such as tea, coffee, cocoa, sugar, and bananas, but did not really gain traction until the 1990s when consumers became aware of many child labor scandals (Warrier, 2011; Thompson, 2014). The garnering of public support fueled a need for labelling initiatives to ensure the origins of the products and their supply chains (Warrier, 2011). Companies and third parties began developing theories, best practices, and performance indicators at the pressure of consumers, which came to a head when people protested labor, environmental, consumer, and societal issues at a World Trade Organization (WTO) conference in Seattle in 1999 (Blowfield, 2000; Cole, 2011). In 1998, the Fairtrade certification and label were launched by Fairtrade Labelling Organizations International (FLO) as an umbrella organization to set standards and create a harmonious Fairtrade movement (Cole, 2011). Recognition of Fairtrade and other ethical label certifications grew in the western world, especially as major corporations began introducing Fairtrade certified products with a visible label. For example, in 2007, Unilever, the world's largest tea company,

announced that their tea crop purchases would be certified sustainable by the Rainforest Alliance. In 2009, Cadbury publicly promised to double their Fairtrade cocoa purchases. With these announcements, the companies committed to investing in a third-party certification process to obtain the certification label. As it grew, fair trade became institutionalized with various international and national certifications and even generic and product specific standards. Fair trade is now an international market system with annual sales of nearly $10B, and it continues to grow as consumers become more ethically conscious and challenged (Warrier, 2011; Statistia, 2019). Moreover, it has become a larger sustainability movement that encompasses ideas of fair trade along with environmental concerns.

Triple Bottom-line Theory

As sustainable sourcing grew, the phrase "triple bottom-line" emerged in the 1980s to transform how businesses think about the traditional bottom-line, profit, to include social and environmental factors, as seen in *Figure 2*. It coincided with the "3Ps" often referenced in sustainability: planet, people, and profit. In the 1990s, it was further articulated as the triple bottom-line management theory, which argues that companies should maximize social, environmental, and economic value to shareholders and stakeholders, which include employees, communities, customers, and the wider society (Blowfield, 2000). Applied specifically to supply chains, triple bottom-line programs typically involve workers and resources in relation to the three factors, seen in *Figure 2*. This requires that 1) workers are paid well so they benefit economically from the production cycle, 2) production, waste, and recycling policies ensure that the land and resources are not exploited and are factors in future prospects, and 3) workers and families receive a good level of social welfare (health, safety, and education) (Warrier, 2011).

The triple bottom-line approach has become the prominent way companies address sustainable sourcing practices and has even extended to corporate social responsibility. Generally, company sustainability programs will have environmental, social, and economic components, but, in practice, companies are not necessarily seeking to maximize value all three areas in the way the triple bottom-line theory is defined.

Figure 2: Triple Bottom-Line Theory

Current Situation

Key Stakeholders

Third Party Certifiers and Organizations: Third party certifiers and organizations establish various labels and certifications used in ethical sourcing, becoming key players as they often help define various terms, such as "Fair Trade Certified" or "Rainforest Alliance Certified." Current key organizations include Fair Trade USA, Fairtrade, the Rainforest Alliance, and the Organic standard. These entities can also streamline various efforts into a coherent, unified vision that is vital to consumer and company understanding, and they can exert significant power to influence industry standards and consumer perceptions.

Consumers: In the past couple of decades, consumers have gradually shown an increasing preference for "ethical" products. Many argue for the power of ethical consumption, which

asserts that consumers vote through their purchases—when they purchase ethically, they are telling companies what they expect of their products. Consumers, in large numbers and if united, can influence industry standards.

Companies and Stockholders: As it is the organization that actually implements sustainability practices, the company is arguably the most important stakeholder. Companies must manage pressures from consumers, third party certifiers, and stockholders. Moreover, large corporations cannot be certified by most fair trade labelling organizations, so they often create their own ethically-certified labels, which can often confuse, dilute, or establish industry standards (Thompson, 2014).

Current Ethical Framework

While sustainability programs have changed over the years, the triple bottom-line approach, which first appeared in the 1980's, remains the primary framework for assessing a company's supply chain (Blowfield, 2000). We still focus on social, environmental, and economic factors, although at varying degrees depending on the company or industry. While the theory has not changed, its implementation has been refined as companies have adopted the framework to their sustainability programs.

Thesis Question

Before evaluating whether companies can effectively implement sustainable sourcing practices with significant impact, it is important to understand if ethical sourcing is even important to customers or companies. I will first analyze the customer and company positions through a literature review of business articles. To answer the main question, I will review a variety of business cases to draw insights from their learnings. For the scope of this paper, I will

focus on six global companies from three different industries: coffee, apparel, and high-tech. Limiting the research to three distinct industries allows comparisons within industries and a manageable study size, while commonalities consistent across these industries can be applied to others as well. This paper will discuss supply chain practices involving workers and resources, but will not cover overall corporate social responsibility programs, which cover a larger scope than company supply chains. Consequently, I seek to answer the following questions: Is ethical sourcing important to companies? Is ethical sourcing important to consumers? How can companies economically and feasibly implement impactful ethical sourcing initiatives?

CHAPTER II

IS ETHICAL SOURCING IMPORTANT?

In this chapter, I will answer the first two questions to explore whether ethical sourcing is important to companies and/or consumers. Objectively, we might say that ethical sourcing is important; currently, the global fashion industry is the most polluting industry—it is responsible for 10% of global CO2 emissions and 25% of the world's pesticides" (Morgan, 2015). We reacted to Walmart's child labor and Nike's sweatshop scandals in 1996, and we continue to react as company sourcing practices are revealed (such as Apple's Foxconn employee suicide scandal in the late 2000s) in the 21st century (Kim, 2016). The impact of supply chain practices is obvious, but let's consider how this has affected consumers and companies. In analyzing the consumer position, I will focus on a purchasing approach called ethical consumerism and evaluate it against historical data; in analyzing the corporate position, I will distinguish between two company approaches, reputation and profit. Using these analyses, I will determine the importance of ethical sourcing.

Analysis on Consumer Position

Ethical Consumerism

When consumers are aware, they will often pay a premium for products of no labor abuse or better environmental impact. Thompson sees this trend in the increasing demand for socially responsible coffee, but it has extended to other products as well (Thompson, 2014). Moreover, with the increase in media revelations and the ease of access to news, uneasiness is building in consumers (Bregman, 2015). More than ever, consumption is becoming "a way for concerned

global citizens to extend the ethics of care to the distant poor through their everyday purchasing behavior," becoming the basis for ethical consumerism (Warrier, 2011).

Thompson defines ethical consumerism as the "philosophy that consumers will purchase or reject products based on their personal values," acting like a social audit (Thompson, 2014). Purchasers choose products, or refuse to choose one; in this choice, they have the power to embrace or reject not only the good, but the process (or practices whether environmental, legal, etc.) to produce it. According to Kirchhoff, "consumption becomes a political choice" (Kirchhoff, 2007). And as a response in the free market, production practices are incentivized to align with consumer values (Kirchhoff, 2007). Ethical consumption works only if consumers' ethical judgments of companies affect their purchase intentions, which we will see in the historical data; however, there are nuances in consumer demographics and their values that change how they evaluate companies and their products.

In a 2015 study, Robert Bregman and his colleagues applied the well-known Hunt-Vitel (H-V) framework of ethics to supply chain management. The H-V model suggests that a consumer's ethical judgement is deontological (right versus wrong) and teleological (focuses on consequences, such as utilitarianism), and together, they influence consumer intention. Their study found that when a consumer has an ethical issue, the consumer will have a deontological evaluation of the alternative and a "teleological evaluation of the comparative value of that alternative" (Bregman, 2015). In addition, the study concludes that "teleological evaluations may directly affect intentions," meaning that the resulting consumer intention could be inconsistent with ethical judgments when consequences change the alternative's comparative value (Bregman, 2015). For example, a consumer may recognize labor abuse in the production of a pair of jeans. However, when evaluated against the alternative of an ethically-sourced pair of

jeans, the consequences, perhaps that the alternative is more expensive, less stylish, not from a specific brand, or difficult to find, may cause the consumer to value the alternative lower. When this happens, the consumer intention would be to purchase the pair of jeans, which is inconsistent with the consumer's ethical judgment. The study displays the complexities of ethical consumerism—that even well-intentioned consumers may not purchase ethically when valued against alternatives (Bergman, 2015).

In the same study, Bregman studied ethical consumerism across various demographics, including age, gender, and income level. While findings were consistent across groups, he did find that "strengths of specific relationships vary between groups" (Bregman, 2015). The strongest relationship he noticed was among age groups, which is consistent with a number of other studies including a 1992 report from Muncy and Vitell that maintained "age as the most significant demographic factor for consumers when classifying the ethicality of questionable behaviors" (Bregman, 2015). In particular, younger consumers were more likely to resonate with issues involving workers and the environment. A 1994 study by Sikula and Costa found that "younger people place higher value on ethical issues related to equality," while Bregman discovered that older consumers are more influenced by community and the importance of oversight responsibilities, seen in their reactions to closing U.S. production facilities and to offshoring of profits (Bregman, 2015). Nielsen's 2015 survey found that 73% of global millennials were willing to pay more for sustainable products, compared to 66% of all global respondents (Consumer Goods' Brands). Thus, younger consumers may value their power in ethical consumption more and be the key to changing company practices (if they can translate ethical judgments into intentions).

Historical Data on Consumer Purchasing Patterns

Consumers are now recognizing the wide-reaching consequences from what they decide to purchase (Cole, 2011). Studies show that when people are aware of the unethical issues or practices, they will pay a premium for better, more ethically produced products (Thompson, 179). In a 2017 Globescan study, researchers found that 81% of U.S. customers would view a brand more favorably if it carried the Fairtrade certification (Why Get Certified). A Nielsen survey in 2015 found that 66% of global respondents are willing to pay a premium for sustainable goods, up from 55% in 2014 and 50% in 2013 (Consumer Goods' Brands). However, Irwin, in an article for *Harvard Business Review*, describes the pessimistic argument: "if consumers cared about moral issues, then companies and brands that did the right thing would have a larger market share" (Irwin, 2015). While survey respondents can say they are more willing to purchase ethical products, do their intentions translate into sales?

One way to answer this question is to look at Fairtrade sales—although this will not capture the value of all ethical products, as not all are Fairtrade certified, it does give a general idea on consumer purchasing patterns. As seen in *Figure 3*, Fairtrade sales have experienced steady growth internationally (the decrease in 2011 resulted from Fair Trade USA's membership withdrawal on December 31, 2011), reaching an estimated $9.53 billion USD in 2017. Fairtrade sales in the U.S. grew by 33% and reached $1 billion USD in 2017; however, the U.S. is third in Fairtrade purchases, behind the United Kingdom and Germany (Duncan; Why Get Certified). Beyond Fairtrade certified products, Statista estimated the global retail value of products with an ethical label (this includes any ethical label, whether Rainforest Alliance, organic, Fairtrade, or C.A.F.E.) to be $793.8 billion USD in 2015 ($217.5 billion in the U.S.) and projects it to be

$872.7 billion by 2020. To put these numbers into perspective, the U.S. consumer goods market in 2015 was estimated at $446 billion USD, the largest in the world (Duncan).

Figure 3: International Revenues of Fairtrade Products by Year

Source: Adapted from Statista

According to surveys, revenues for Fairtrade products or ethical label products should be higher than they are. Irwin, however, explains the discrepancy. “Ethical information is difficult to process, and it is common for consumers to want to remain willfully ignorant of it” (Irwin, 2015). Instead of learning about brands, customers, who claim to care, remain ignorant, and without awareness, they cannot change their purchasing behaviors. Moreover, answering “yes” on a survey is much easier than the tradeoff consumers face in purchasing an ethical product (usually a higher price), resulting in inconsistent data (Irwin, 2015). While survey answers have not fully translated into sales, it is apparent that a large percentage is still translating into sales, leading to the projected $872.7 billion USD ethical label product market in 2020, and growing market share (Duncan). While customers do not care as much as they say they do, it is obvious that they do still care.

Analysis on Corporate Position

It is evident by companies' sustainability programs and their extensive use of fair trade or ethical product labelling that consumers' concerns are important to and have been heard by companies (Wright, 2017). It is unclear whether companies are implementing these programs because of consumers; however, while reading about companies' sustainability programs, it becomes apparent that companies act very differently depending on their consumer group. Some companies, such as Walmart or Ford, do not have environmental or social impact built into their value propositions. Consumers choose Walmart to "Save Money. Live Better." Consumers choose Ford to "Go Further." These companies seem to have diverse customers, some who may care about ethical sourcing and many who may not. We will call this the profit approach. On the other hand, there are companies, such as Whole Foods or Tesla, that have consumers who specifically choose to purchase from them because their value propositions deliver something beyond economic impact. For Whole Foods, customers shop there to purchase organic, ethically-sourced food. For Tesla, customers want a car with better environmental impact. These companies, whether they initiated it from the beginning or not, have built a reputation with certain values that have cultivated a consumer group made of ethical customers—we will call this the reputation approach.

The Reputation Approach

Reputation is important to every firm. Firms are protective of brand image, and, specifically, large firms at the consumer end have high commitments to their reputations (Wright, 2016). In many cases, media revelations, such as those exposing sweatshop-like working conditions, have incited firms to implement strong public relations efforts on

sustainability (Bregman, 2015). In other cases, firms began efforts to maintain reputation themselves, without the presence of external pressures. Regardless, concern over reputation shows that "companies believe that negative consumer perceptions of these practices may have an adverse effect on their firms" (Bregman, 2015). However, their preoccupation on reputation caused Blowfield to ask, is sustainability really a core objective or is it serving a company's reputation?

Companies with value propositions beyond just profit, and oftentimes as a result, ethical consumers, seem to have a greater concern for their reputation. These companies' concerns seem valid though—imagine discovering that an organic apple you purchased from Whole Foods came from a farm with poor working conditions. Then, imagine discovering that an apple you purchased from Walmart came from the same farm with poor working conditions. While the product and practices are the same, it seems worse from Whole Foods, perhaps because it is part of their value proposition, brand, and reputation, which has built a certain expectation from their customers. Whole Foods was an early pioneer in building sustainability in both its philosophy and operations. It takes a holistic approach, ensuring products and packaging are environmentally, economically, and socially impactful (in line with the triple bottom-line), and perhaps because of their proactive approach to sustainability, they have created an ethical reputation (Warrier, 2011). While customers do hold the firm to a higher standard now, Whole Foods can also see benefits. Consumers have higher standards for their products, associate a higher value, and as a result, a higher willingness to pay. In other words, it is easier for Whole Foods to pass the cost of ethical sourcing to its customers. The Whole Foods example seems applicable across all companies with value propositions beyond the bottom-line. Tesla customers have a higher willingness to pay for an electric vehicle. Solar panel consumers have a higher

willingness to pay for renewable energy. These companies have the ability to push significant sustainable sourcing costs to their consumers.

The Profit Approach

Companies that are still profit first, that only care about their bottom-line, generally have diverse customer bases that are less willing to incur costs of ethical sourcing. However, these companies still face internal or external pressures, like media revelations discussed previously, to change sourcing practices. For companies like Walmart or Ford, it is difficult to build a reputation like Whole Foods' or Tesla's when their product's value proposition is not socially or environmentally beneficial. In fact, major companies such as Walmart have admitted to using fair trade as a marketing tool, even if they do not meet Fair Trade's ethical standards (Wright, 2017). Implementing Fair Trade standards are expensive for cost-cutting companies like Walmart that are unable to pass on sustainable sourcing costs. If ethical sourcing is important to consumers and companies, how then does a company with a diverse customer base economically and feasibly implement impactful ethical sourcing initiatives?

CHAPTER III

CASE STUDIES

Introduction

Ethical sourcing may be easier for some companies than others. As we have discussed, for companies like Whole Foods and Tesla, their consumer bases are relatively similar in their concerns for organic food or an environmentally friendly car. In these cases, the increased costs of sourcing organically or manufacturing with minimal environmental impact can be more easily passed to the customer as the "ethical" consumer's willingness to pay is higher. However, only a few companies are in this niche category; namely, the category consists of companies who have focused on a "greater good" from their inceptions, such as renewable energy and organic food companies or social enterprises. How then does a company with a diverse customer base succeed in ethical sourcing?

In this chapter, six companies from three different industries will be analyzed to understand how they have failed and succeeded in their attempts at ethical sourcing. The three industries—coffee, apparel, and high-tech—have distinct industry properties that shape their product's value chain and change supplier relationships. The chosen companies—Equal Exchange, Starbucks, Nike, Patagonia, Apple, and IBM—vary in size, resources, capabilities, and success, but all have diverse customer bases and a mission to improve their sourcing practices. By looking at the six companies, we can draw insights on the key success factors for companies that hope to also implement better sustainable supply chain practices.

The Coffee Industry

Coffee, one of the world's most traded commodities, is often called the "quintessential fair trade product" (Warrier, 2011). It is a $90 billion per year industry, producing around 18 million pounds of coffee a year (Cole, 2011). The industry is notoriously volatile, exaggerated by production cycles and other uncertainties including weather, pests, and labor shortages (Warrier, 2011). One coffee bean is handled by at least 20 people, following a path from the hands of small-scale farmers to purchasers to private exporters to coffee importers and traders to small traders and brokers or directly to coffee manufacturers, and finally, to a coffee retailer (Thompson, 2014). According to Mark Pendergrast, former Executive Director of the Specialty Coffee Association of America (SCAA), there are up to 75 million people working in the industry (Cole, 2011). One-third of these people are farmers, who are generally the most affected party of volatile production cycles (Thompson, 2014). Because time between planting a coffee tree and harvesting for the first time is anywhere between three and five years, reactions to rising or falling prices are highly magnified. This causes periods of underproduction and overproduction that are difficult to match supply with demand (Warrier, 2011; Thompson, 2014).

As the "quintessential fair trade product," coffee was the first consumer good to have an ethical framework, which begs the question of what properties make it a perfect ethical commodity (Cole, 2011). From the beginnings of coffee trade, its history of using slaves, indentured servants, and poor peasants as the main laborers, coupled with its history of volatile prices, the industry's success was built on production from the poorest countries to be purchased and consumed by the wealthiest (Cole, 2011; Thompson, 2014). The product itself creates a disparity that many consumers are recognizing today, as coffee is a physical commodity that more than half of U.S. adults consume on a daily basis, easily visualizing the link between their

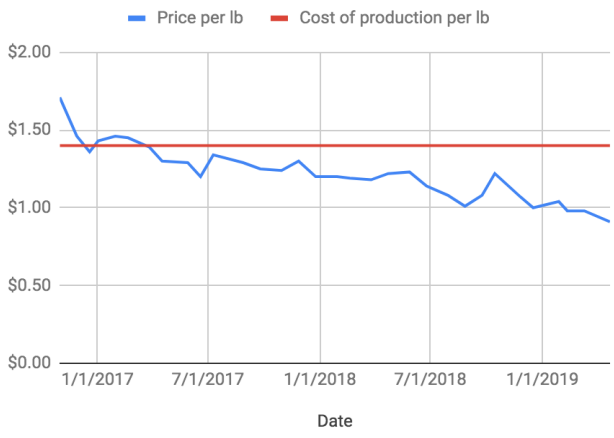
coffee and ethics (Cole, 2011; Thompson, 2014). As a consumer sips coffee in a coffee shop, oftentimes decorated with artwork of coffee plantations, coffee beans, or farmers on the walls, he or she can imagine the coffee bean or the farmer or the journey the bean made from another country. This awareness has resulted in an increasing demand for socially responsible coffee (Thompson, 2014).

Currently, the coffee industry is a market for fair trade certification, using a price floor as its main regulation method of the market (Thompson, 2014; Warrier, 2011). This stabilizes prices, addressing the volatility in the market; however, fair trade certifications can extend beyond just prices. Certifications eliminate most intermediaries (like traders or brokers), so that farmers receive more money for their products. Farmers can receive credit before harvesting, and their financing and working conditions must be transparent. Fair trade certifications also encourage long-term contracts to build relationships, trust, and overall better working conditions (Thompson, 2014). The Fair Trade certification or label was launched in 1998, but the industry has seen rapid growth as large companies like Dunkin' Donuts, Kraft, and Procter & Gamble have embraced fair trade coffee (Cole, 2011). It continues to grow, but there are some limitations to the current method.

While there are certifications and internal standards in many large companies, there is no industry agreement on what "ethical coffee" is (Cole, 2011). This may be because large corporations cannot be certified by most fair-trade labelling organizations, so they create their own ethically-certified labels, thereby increasing the number of different labels and definitions for "ethical coffee" (Thompson, 2014). The current ideological split of whether to certify a transnational corporation's coffee farms also brings up a concern for lack of transparency and oversight as more and more coffees are being called "fair trade" based on different definitions

(Thompson, 2014; Cole, 2011). However, the most recent concern in the industry returns to the volatility of the coffee market. In the current weak global coffee market, "coffee prices have been stuck below the cost of production for the longest stretch since the global financial crisis" (Whelan, 2018). In fact, according to FactSet data and seen in *Figure 4*, coffee prices have been below the average cost of coffee production, $1.40 per pound, for 26 straight months, and as of May 3, 2019, the coffee price was less than $0.90 per pound (Whelan, 2018; Coffee Prices, 2019). Recent currency fluctuations, in which Brazil's real weakened 14% against the dollar, have encouraged sales and production in Brazil, the world's largest coffee producer. As coffee is sold in U.S. dollars, Brazilian producers have an advantage and recoup more local currency when sales are converted (Whelan, 2018). Cooperatives that use price floors of $1.40 are unable to accommodate more farmers as there is not enough demand for fair trade coffee, leaving the industry and its farmers weak and defeated. As the "quintessential fair trade product," coffee has clearly brought ethical sourcing to the forefront of consumers' and companies' concerns; however, it has also exposed the complexities of the market, standardization, and transparency among the current certification solutions.

Figure 4: Coffee Prices Compared to Cost of Production



Source: Adapted from Coffee Prices - 45 Year Historical Chart

Case: Equal Exchange

In 1986, Jonathan Rosenthal, Michael Rozyne, and Rink Dickinson, managers at a New England food cooperative, had a vision: *Fairness to farmers. A closer connection between people and the farmers we all rely on.* For three years, they decided to meet once a week, discussing global food sourcing, current methods, and how to improve the situation. When they clearly knew their vision, they quit their jobs and started Equal Exchange (Equal Exchange, 2018).

With $100K, they started the new company to be: a social change organization that gives farmers more economic control, a group that educates consumers, a provider of high-quality foods, a company controlled by the people who worked, and a community of individuals who believed "honesty, respect, and mutual benefits are integral to any worthwhile endeavor" (Equal Exchange, 2018). While Rosenthal, Rozyne, and Dickinson created their vision, America saw a change in its food industry as the public became aware of industrially used toxic fertilizers and pesticides in food production. The U.S. coffee market was also changing as consumers shifted towards specialty coffee. As a result, Equal Exchange began their venture with fairly traded specialty coffee, specifically Nicaraguan coffee they called Café Nica (Equal Exchange, 2018).

Their choice, however, came with many obstacles. In 1986, the Reagan administration issued a trade embargo on all Nicaraguan products, so in choosing Nicaraguan coffee, the "Forbidden Coffee," Equal Exchange would be challenging U.S. trade policies. Equal Exchange found a loophole, roasting Nicaraguan coffee with the help of a Dutch trade organization, which made the coffee technically from the Netherlands, and, therefore, a legal import. When the Reagan administration heard, officials at the port of Boston seized Equal Exchange's coffee upon arrival. The founders, along with their lawyers, spent much of two years battling custom officials to release their coffee. In 1988, they faced another obstacle from the government—the Office of

Foreign Assets Control, with a reinterpretation of the Nicaragua embargo, planned to close the loophole Equal Exchange counted on to legally import Nicaraguan coffee. In response, Equal Exchange launched a campaign to stop the reinterpretation, quickly gaining the support of local and national congressmen and grassroots support. The campaign proved successful, handing them a much-needed victory (Equal Exchange, 2018).

After a rocky beginning, Equal Exchange grew quickly in the 1990s, hitting many critical milestones. In 1991, the company was established as a Fair Trade specialty coffee company and became a part of the European Fair Trade Network, organizations that were ahead of the U.S. movement. By the end of 1991, it had reached $1 million in sales. By 1994, there were twenty members in the worker-owned cooperative. In the 90s, the American customer segment for Fair Trade products grew, resulting in a Fair Trade product certification system launched in the U.S. by TransFair USA in 1998. Equal Exchange expanded its coffee to include Cafe Salvador, Organic Peruvian, and a full product line of whole beans, decaf, different roasts, and flavored coffee. The company also expanded beyond coffee, introducing Fair Trade tea, cocoa, and chocolate (Equal Exchange, 2018).

Today, Equal Exchange has grown to reach $70 million in sales (in comparison, Starbucks purchased almost $70 million of Fairtrade coffee in 2011) and founded a sister company, Equal Exchange U.K., while maintaining and strengthening its Fair Trade model (Starbucks, 2018; Equal Exchange, 2018). There are over 400 coffee companies, including the aforementioned Starbucks and Nestlé, that purchase at least some of their coffee under Fair Trade terms. However, Equal Exchange admits that “the acceptance of large plantations and corporations such as Nestlé into the Fair Trade labeling system calls into question the very underpinnings of the certification system of which we are a part. And even with our successes,

most small-scale farmers around the world remain impoverished and at the mercy of volatile and complex commodity systems" (Equal Exchange, 2018). To continue transforming the Fair Trade system, the company says it "needs to engage and collaborate with like-minded partners and stakeholders throughout the Fair Trade system" (Equal Exchange, 2018). It explicitly describes one goal: "bringing Fair Trade home—by fostering direct relationships with family farmers here in the United States," which it has already begun with nuts, berries, and banana farmers (Equal Exchange, 2018).

Case: Starbucks

Starbucks is probably the most well-known and controversial name in the coffee world—consumers either love it or hate it, and similarly, ethically concerned consumers might love it or hate it. As a customer sits in the coffee shop sipping a warm pumpkin spice latte, he or she may look around the store and see signs reading "ethically sourced" or "community first." In 2017, Starbuck's Director of Ethical Sourcing, Kelly Goodejohn, defined ethical sourcing as "ensuring that coffee is grown in a way that is good for people and the planet," but does the company actually accomplish this (Goodejohn, 2017)?

The first Starbucks store opened at Pike Place Market selling "premium quality, small-batch specialty roasted coffee," and the company has now grown to sell over 400 million pounds of coffee in 25,000 stores in 75 countries, all with the company's popular drinks and logo (Cole, 2011; Bruce). While it was experiencing rapid growth in 1999, protests and riots at the World Trade Organization's conference in Seattle broke out over labor, environmental, and consumer issues (Cole, 2011). This proved to be a transformative period for Starbucks as public concerns intensified their efforts that started in 1998 to partner with Conservation International (CI) to

create "Coffee and Farmer Equity (C.A.F.E.) Practices," one of the industry's first comprehensive set of sustainability standards verified by third party experts (Goodejohn, 2017). The company opted to create its own program and standards for two main reasons—the existing certifications did not include quality as a prerequisite, which was vital to Starbucks, and the program had to work with its diverse relationships with suppliers, which range from large estates to unorganized small holders and farmers. Starbucks started buying Fairtrade coffee and used the C.A.F.E. Practices as standards for purchasing in response to these protests (Cole, 2011). However, since then, its initiatives have encompassed more than coffee bean sourcing, following the triple bottom-line approach of improving economic, environmental, and social standards (Bruce). In 2001, Starbucks released its first Corporate Social Responsibility report, detailing company goals and priorities (Cole, 67). In 2008, they announced a goal to ethically source 100% of coffee by 2015 (Goodejohn, 2017). In 2009, Starbucks doubled purchases of Fairtrade-certified coffee to $64M, becoming the largest single buyer in the world (Warrier, 2011). When 2015 came around, Starbucks had almost met its goal—99% of its coffee sold was verified by outside certification as ethically sourced (Bruce).

The company seems to maintain and even strengthen its momentum with broader, more far-reaching goals. On their website, there is an obvious focus on social impact, with its own section addressing community, ethical sourcing, and the environment. They have programs for diverse hiring, farming communities, supplier diversity, LEED stores, water and energy conservation, and much more (Starbucks, 2018). However, the most impressive is the Global Social Impact Report, which actually quantifies the goals of their programs, making them more realistic and measurable. The company has four main goals: 1) Make coffee the world's first sustainable agricultural product to improve the lives of at least one million, 2) Be the world's

largest green retail business, 3) Find pathways to employ 1 million people, and 4) Strengthen communities. Within each main goal, the company then dives deeper, talking about more detailed metrics. For example, Starbucks is committed to 100% ethically sourced coffee, tea, and cocoa, $50M invested in funding for farmers, and 100% invested in renewable energy to power operations globally by 2020. Their report has too many goals to enumerate them all, but from the report, it seems that Starbucks has become a company strongly built on ethical sourcing, perhaps best summed up with this quote from their website:

> *What is the role and responsibility of a for-profit, public company?*
>
> *We have always believed Starbucks can – and should – have a positive impact on the communities we serve. One person, one cup and one neighborhood at a time* (Starbucks, 2019).

Although Starbucks did not meet its goal of 100% ethically sourced coffee by 2015, Director of Ethical Sourcing Kelly Goodejohn, in a 2017 article, points out some unexpected challenges and why the last 1% means Starbucks is, as a matter of fact, succeeding. First, Goodejohn points out, the 2008 financial crisis caused Starbucks' stock price to hit an all-time low. With weak performance, the entire company had to re-evaluate the business—from the product, to the process, to the company structure. Through this evaluation, the leaders saw a clear vision: "investing in coffee for the long term" (Goodejohn, 2017). Goodejohn explains that the last 1% to meet their ethically sourced coffee goal means the company is committed to areas that need Starbucks' help. She gives an example of East Congo, a war-torn region, whose coffee farmers would not have had the infrastructure required for C.A.F.E. verification in 2015; however, that should not disqualify the farmers from working with Starbucks. Instead, purchasing from these coffee farmers is a long-term commitment to the people and to that region

to improve their work. In fact, Goodejohn goes so far to declare that, "the well-being of all coffee farmers is a business imperative for us—all of us" (Goodejohn, 2017). This does not just include the approximately 300K farmers that are already Starbucks partners, but all coffee farmers in the world, which totals to around 25M. Surprisingly, Starbucks only represents 3% of the world's yearly coffee production, so as Starbucks rightly believes, there is still much to accomplish in this industry (Goodejohn, 2017).

The Apparel Industry

The birth of the U.S. clothing industry, if it had one, "was in the emporiums and warehouses that appeared in New York and other American seaboard entrepots after the end of war and the reopening of European trade in 1815" (Zakim, 1999). As the clothing industry began in America after 1815, it integrated several important markets: trans-Atlantic trade for cloth, urban trade in labor, and a manufactured goods market in the U.S. (Zakim, 1999). From the beginning, it relied on cheap labor of "impoverished seamstresses to sew the goods," resulting in social hierarchies of "in-house trimmers, southern-work cutters, vest embroiderers...and subcontracted plain shirt-makers earning...starvation wages" (Zakim, 1999). Many of them were immigrant workers, with large numbers of women and children, who were willing to work longer hours for less pay in order to stay in the country. Oftentimes, they worked "more than 12 hours a day, 7 days a week, in crowded, unsanitary conditions and were paid an hourly wage of 5 cents," equivalent to about $1.50 USD in 2019 (Cheek, 2003).

The sewing machine, invented in 1846, and paper patterns, invented in 1853, and other technological improvements spurred the fast growth of the ready-to-wear clothing industry, and consumers responded quickly to it. With high consumer demand, clothing companies took

advantage of the readily available cheap textiles and labor and made tremendous profits. Technological innovations should have decreased labor needs; however, the industry remained labor-intensive and generally worked in sweatshops (Cheek, 2003).

According to Redden and Beyer (1993), a sweatshop is "a business that regularly violates wage, child labor, safety or health laws designed to protect employees from exploitation." While apparel labor unions were in infant stages, in 1911, a fire at the Triangle Shirtwaist Factory in New York shocked the public into awareness of working conditions. The sobering reality of sweatshops became apparent when 146 young immigrant women died in that fire, helping apparel labor unions gain traction in workplace safety and health reforms. The U.S. government addressed minimum wage and child labor with the Fair Labor Standards Act of 1938 and created the Equal Opportunity Employment Commission and the Occupational Safety and Health Administration to enforce regulations. However, these regulations did not completely eliminate apparel sweatshops in the United States. In the late 1970s, evidence of sweatshops in the U.S. emerged again. In addition, apparel producers began using cost-competitive foreign contractors, often with poor working conditions, at various steps of the clothing production supply chain. Increased globalization, encouraged by free trade programs, such as the North American Free Trade Agreement (NAFTA) and the World Trade Organization (WTO) agreements, have continued to increase the number of foreign contractors to the point where they make up most of the production of large U.S. retailers. For example, in 2003, Nike products were manufactured by more than 400 factories in 43 different countries (now 527 factories in 42 different countries) (Nike, 2019). These large, competitive retailers have the bargaining power to pressure suppliers for low costs, forcing contractors to then produce at that low cost or lose the contract. In these cases, it is not a surprise that "the squeeze occurs at the bottom of the pyramid where cuts are

made at the expense of workers' wages as well as through unsafe, makeshift workplaces" (Cheek, 2003).

Moreover, consumer demand bolsters this vicious cycle, as we expect low prices from clothing retailers who in turn pressure their suppliers. Americans spend about 3% of their total purchases on apparel and services (Bureau of Labor Statistics, 2017), and over two thirds of the purchases are made from foreign factories that have lower labor costs. This allows for lower retail prices, which form customer expectations and, hence, demand, encouraging the vicious cycle. Cheek describes the cyclical pattern that promulgates labor problems in the clothing industry, highlighting the four main issues: increased globalization that makes determining how and where apparel is produced more difficult, retailers offering products made under these conditions to increase profit, lack of transparency in monitoring and regulating, and consumer demand (Cheek, 2003). These issues are not just isolated to the clothing industry, but could be the root issues of ethical sourcing problems in every industry.

Case: Nike

"Just do it," the Nike swoosh, Nike's trademarks are known around the world. It is the leading athletic wear company, worn by everyone from Lebron James and Michael Phelps to your next-door neighbor's five-year-old son, earning over $40 billion in revenues in 2018. With its September 2018 ad campaigns featuring controversial football player, Colin Kaepernick, it is clear that Nike is neither new to or afraid of public backlash and taking a stand. In its supply chain practices, Nike's approach has incited that type of public backlash, forcing Nike to respond. In its 1997 annual report, the company wrote: "Nike is not here to create a new world order. We are not here to eliminate poverty and famine or lead the war against violence and crime...our critics, for the most part, aren't athletes" (Paine, 2016). In a little over ten years, the

company's worldview quickly changed, with its CEO, Mark Parker, writing in Nike's 2011 annual report: "I believe that any company doing business today has two simple options: embrace sustainability as a core part of your growth strategy, or eventually stop growing" (Paine, 2016). In just a decade's time, Nike's sourcing approach, and arguably its overall company values have dramatically shifted (Paine, 2016).

In the 1990s, Nike was increasingly scrutinized as its suppliers' sweatshop factories and working conditions were exposed to the public, including a 1996 *New York Times* article that described worker conditions in Indonesia and criticized Nike's part in compromising human rights progress in Asia. The scandals were quickly noticed by college students, a target customer segment for the company, whose activism can be considered the inciter of a major shift in company attitude towards sustainability. In 1997, the students' "Just Don't Do It" campaigns and calls to "Flush the Swoosh" at first garnered a defensive response from Nike, who tried to distinguish itself from its suppliers whose actions Nike did not deem itself responsible for. Moreover, the company argued that by the manufacturing countries' standards, the wages and working conditions were justified. However, in 1998, during the ongoing public outcry against Nike, co-founder Phil Knight acknowledged in a speech that "the Nike name has become synonymous with slave wages, forced overtime, and arbitrary abuse," and he committed the company to change. Internally, he told a Nike board member, "we're going to fix them [the problems] and we're going to raise the standards of the whole industry" (Paine, 2016).

Nike started to "fix" these problems by forming a Corporate Responsibility (CR) department and board-level committee in a time when few companies had these initiatives. Jill Ker Conway, a Nike board member said, "Phil's ownership in the company meant that when he made CR a priority, the board began to ask questions about CR issues and plans, not just about

the budget. It gave the CR team the mandate to pursue its strategic priorities aggressively" (Paine, 2016). Knight offered Conway the opportunity to chair the committee, which she accepted on the condition that Knight would be at every meeting, ensuring that the committee would not be diminished. An initial task for the new CR team was preparing a report discussing Nike's focus first on labor issues, then environmental issues and philanthropy. This report would include information on labor practices, community affairs, Nike employees, engagement with other NGOs, and other stakeholders, and it would set Nike's first public targets on CR. However, these were just Nike's first steps (Paine, 2016).

For the most part, the CR department monitored and policed, reacting to major problems instead of preempting them. However, Hannah Jones, who in 2004 became the Vice President of CR, realized, "that you can either solve a worker's rights issue by monitoring every single factory 24 hours a day for whether they're wearing personal protective equipment. Or you can innovate a new glue that removes all the toxics so you don't have to have the personal protective equipment" (Paine, 2016). This focus on innovation would become vital to Nike. Around the same time, the CR committee was noticing two sets of problems—truly isolated ones and those part of a larger pattern. They would form task forces for those with a larger pattern, and in 2005, when they formed one on excessive overtime, they found that the root problem was the front-end of the supply chain, not necessarily the changes in demand or lack of materials in factories that they had originally thought. Coupling the discovery of front-end challenges with Jones' epiphany, Jones pushed for innovative solutions that would be much faster and more scalable than their policing. She advocated to publish a complete list of factories and locations, arguing that transparency helps critics and NGOs to go out and evaluate supplier conditions, essentially monitoring and policing so that Nike could then address the problems. More importantly, this

would allow Nike to collaborate with other companies that used the same factories to coordinate inspections and common standards, therefore decreasing costs. This move helped separate its passive solutions of monitoring and policing from active innovation (Paine, 2016).

In order to build capabilities, Jones strengthened the department, acquiring talent, finding people to do strategic analysis and financial planning for sustainability factors, while developing her own understanding of design. The committee created workshops exploring implications of major global trends, such as population growth, water scarcity, energy shortages, climate change, health issues, governance, etc. For example, models of projected water shortages revealed potential for disruptions and cost increases at multiple points in Nike's value chain. This was particularly concerning knowing that the United Nations estimates that 1.8 billion people will live in areas of water scarcity by 2025 and two-thirds of the population will experience water stress. Knowledge from these workshops incited Nike's Considered Design ethos: a closed-loop manufacturing system that minimizes waste by using outputs as inputs. In scoring to the Considered scale, Nike's designers can quickly evaluate, quantitatively, environmental impact of their prospective designs. This shift in view was reflected in Nike's May 2007 reports, writing that CR is a "catalyst for growth and innovation" (Paine, 2016). Nike's innovation can perhaps be most impactful in its minority investment in DyeCoo Textile Systems, a Netherlands start-up developing a waterless process for dyeing polyester. No water compared to 12-18 gallons of water per pound of fabric could have a massive impact on the entire industry. Thus, instead of acquiring DyeCoo and using the technology as a proprietary asset, Nike aimed to invest and help commercialize the technology for widespread use across the industry. IKEA took notice and also invested in DyeCoo, with Adidas soon following. Dyecoo has now been implemented in many Nike factories and was used in Nike's Super Bowl 50 collection (Paine, 2016).

Despite these successful efforts, Nike still faced challenges. In late 2008, labor issues in a long-time contract factory in Malaysia arose; in 2011, two Honduran subcontractors closed their factories without notice or severance to employees, resulting in protests from many student groups, reminiscent of those from the 90s. The leadership team, in an effort called Project Rewire, decided to build greater accountability by adding sustainability factors to performance metrics used to evaluate the executives responsible for sourcing decisions. Additionally, the financial crisis of 2008 led to a major restructuring of the company, also providing an opportunity to reconstruct sustainability in the business. The CR group was renamed the "Sustainable Business & Innovation" (SB&I) team, and it introduced dual reporting lines, an internal audit program, and a SB&I Lab focusing on closed loop materials and manufacturing. In response to the 2011 incident in Honduras, Nike organized an agreement for the Honduran government to make severance payments, and Nike created a $1.5M Workers' Relief Fund to provide training and health coverage for laid-off workers. Nike suffered another hit in 2011 when Greenpeace, based on findings from a two-year investigation called "Dirty Laundry," launched a high-profile campaign charging Nike, adidas, Li Ning, and other well-known apparel companies for allowing suppliers to release hazardous chemicals into water supply. As a result, Greenpeace issued the Detox Challenge, pitting the companies against each other in a race to "detox our sportswear, detox our water, and ultimately, detox our future" (Paine, 2016). While Nike quickly issued a public response, eventually announced commitment to zero discharge of hazardous chemicals by 2020, and released a roadmap of actions, it proved to be much more complex of an issue. Nike had been working on this particular issue, but the Greenpeace campaign sharply condensed the timeline. With the higher costs required to reach 2020 targets, the question of where costs should be absorbed—product, suppliers, or consumer—was asked by

Eric Sprunk, VP of Merchandising and Product and executive representative to the board's CR committee. He was concerned about suppliers' margins, thus wondering, "Can we ask the consumer for those dollars in the price of our product? What if they don't care if harmful chemicals have ended up in wastewater during production?" (Paine, 2016).

Case: Patagonia

Patagonia's stated mission says, "Make the best product, cause no unnecessary harm, and use business to inspire and implement solutions to the environmental crisis" (Chouinard, 2019). But, its mission statement became the crux of one of its most pressing problems in 2015. Durable water repellent (DWR) is a chemical treatment to waterproof jackets for extreme conditions. Its by-products are toxic, containing perfluorinated compounds (PFCs) that are petroleum-based (also found in non-stick cookware, paints, and carpet stain treatments). While Patagonia had previously been aware of DWR's by-products, it stood by its mission to "make the best product" (O'Rourke, 2017; Chouinard, 2019). According to Tetsuya Ohara, Patagonia's Director of Innovation Research: "DWR is so important in outdoor gear because people go to inclement weather like snow or rain and if the gear naturally 'wets out,' it reduces human temperature and energy and that can be dangerous" (O'Rourke, 2017). However, Greenpeace released a study in 2015 that found traces of PFCs in high-altitude lakes, lakes that mountain climbers wearing DWR treated jackets would have been near. Patagonia now faced the tension between "mak[ing] the best product" and "caus[ing] no unnecessary harm" (Chouinard, 2019).

Company executives considered multiple solutions, eventually finding one temporary solution and multiple long-term solutions. The existing DWR treatment Patagonia used, C8, was highly effective and durable, but the company could switch to a shorter chain C6 treatment,

which breaks down faster in the environment and is less toxic. However, switching to C6 would shorten the product's life span, as apparel would become less repellent faster, meaning it would have to be replaced more frequently. With each replacement, the clothing has its own set of energy, textile, and environmental resource needs that are a trade-off for Patagonia's temporary DWR solution. After assessing customer response to the new DWR treatment, it committed to a 100% transition to short-chain DWRs by spring 2016 (O'Rourke, 2017).

Although the temporary solution would have been enough for some companies, Patagonia still believes it can "make the best product" with a more environmental solution. It has researched and tested different treatments for years, along with other apparel companies and chemical companies like Dow and DuPont, but in 2015 it made two significant investments: in Swiss company, BST, which develops new technologies using natural raw materials in textiles and its own research, calling it Blue Sky Innovation. By investing in research, Patagonia has a goal to "be first to market, but then open source this innovation to the industry in order to amplify the environmental benefits" (O'Rourke, 2017). And it seems to be working. BST has introduced three different bio-based products used by Patagonia, Levi's, adidas, Nike, and Puma. With Blue Sky Innovation, Patagonia has invented the leading environmentally friendly wetsuit that has performed so well that other industry players are also adopting as costs continue to decrease. In Patagonia's research, it is focusing on biomimicry; "it's fascinating how the surface of animals, over the years, has learned how to repel water. We're trying to learn how to apply hydrophobicity to our products" (O'Rourke, 2017).

On its company website, Patagonia tells its history to becoming, as one reviewer says, "one of the most respected and environmentally responsible companies on earth," first by realizing that Patagonia is part of the problem—in fact, we all are.

> *We can't pose Patagonia as the model of a responsible company...But we can tell you how we came to realize our environmental and social responsibilities, and then began to act on them. Like other things in human life, it began with one step that led to another* (Patagonia, 2019).

Patagonia opened its first store for climbing equipment in Boston in spring 1988. While opening days are almost always hectic yet exhilarating, the founder, Yvon Chouinard, could not have foreseen the opening chaos as many store workers became sick, mostly with headaches. After investigating, they found the problem: a poor ventilation system recycling formaldehyde from cotton clothes stored in the basement. Upon further investigation on conventional cotton, they found that the pesticides used for cotton made it "one of the most destructive crops in the agricultural world" (Patagonia, 2019).

Even larger than the cotton problem, Yvon Chouinard, founder and owner of Patagonia, and his growing company, faced an existential crisis threatening to close down the company. In 1991, the U.S. entered a recession, and Patagonia's 30-50% compound annual growth stopped. It only grew 20 percent. Many companies would balk at this number, but previously planned and purchased inventory built up as dealers canceled orders. As inventory piled, the company cut production as much as possible and reduced spending. However, primary lender, Security Pacific Bank, also in financial trouble, reduced their credit line, resulting in a series of Patagonia layoffs including the CEO, CFO, and 120 employees. Chouinard calls Black Wednesday, the day he let 120 employees go, "the single darkest day of the company's history" (Chouinard, 2016). The company's unsustainable growth had jeopardized company values. In response, Chouinard flew his managers to the Patagonia region of Argentina to discuss shared values and culture of the

company. They returned with a formulated Patagonia philosophy to be in "business to save our home planet" (Chouinard, 2016; Patagonia, 2019).

As Chouinard began teaching Patagonia philosophy classes to employees, he slowly began to turnaround the company. Now focused, Patagonia grew at a controlled rate of about 5% a year, with careful management that was consistent with their philosophies. After conducting a life-cycle analysis on four fibers and the cotton problems of 1988, the company completely switched to organic cotton by spring of 1996, and "once you start, you can't stop" (Chouinard, 2016; Patagonia, 2019). After implementing organic cotton, they examined every step of Patagonia's supply chain—the raw materials, the fabric, the factories, and the finished goods. They selected certain articles of clothing and measured each of their environmental impacts. They assessed working conditions and pay, learned to use recycled plastic bottles in jackets, and examined the environmental impacts of their overall operations, whether paper for catalogs or energy consumption at retail stores. As a result, the company has more Fair Trade Certified styles than any other apparel company; it has given over $70 million to environmental causes and started two North American business philanthropies; and it was a founding member of various labor and social responsibility organizations. (Patagonia, 2019).

Since its 1991 to 1992 crisis, Patagonia has focused on maintaining its mission statement, not facing any major crises in the last two decades and growing to the outdoor apparel and equipment giant it is today. In 2012, the company formally converted to a benefit corporation, legally aligning with its goals. As a benefit corporation, Patagonia was committing to higher levels of specificity in its impact on society, workers, and the environment (Kenney, 2018). To support this move, the company built multiple teams to work on social-environmental responsibility, official reporting, and grants and community giving programs. Now, to

Chouinard, one of his biggest challenges is "combating complacency" (Chouinard, 2016). Patagonia's refreshing mission and equally refreshing outlook at its mission is changing how companies to do business. It remains hopeful, but realistic, openly admitting that there is much to be done. In the end, Patagonia may never be completely responsible, but it is an experiment—"it exists to put into action those recommendations that all the doomsday books on the health of our home planet say we must do immediately to avoid the certain destruction of nature and collapse of our civilization" (Chouinard, 2016). "We have a long way to go and we don't have a map – but we do have a way to read the terrain and to take the next step, and then the next" (Patagonia, 2019). As a company, it has the means and the will "to prove to the rest of the business world that doing the right thing makes for good and profitable business" (Chouinard, 2016).

The High-Tech Industry

In the past two decades, technology has transformed our world. Companies like Apple, Microsoft, Amazon, and Google have become renowned brands, known for innovation, quality, and new products. It permeates every part of our lives, but perhaps not as much as in consumer technology products like PCs and smartphones, often sitting a few centimeters away from us. A Greenpeace report found that more than 3 billion people owned smartphones in 2015 and expect more than 6 billion, over 70% of the world's population, to own one in 2020 (Greenpeace, 2017). We use these products almost daily, but what do we actually know about where they come from?

"The global electronics industry boasts of technical perfection and seamless production," but when the industry is closely examined, it does not meet what we would call "perfection" (Chen, 2016). According to a Greenpeace USA report, their supply chain and manufacturing processes are "reliant on 19th-century sources of energy, dangerous mining practices, hazardous

chemicals, and poorly designed products that drive consumption of the Earth's resources" (Greenpeace, 2017). Moreover, the human impact is also devastating. While many may be under the impression that high-tech products are assembled through fancy machines and automated systems, the reality is that it remains a human labor intensive industry relying mostly on factories in China. Many of these factories have the same concerning conditions of the apparel industry's sweatshops, where overtime, low wages, and health concerns are prevalent. In 2013, a public health survey was conducted among 7,600 electronics workers, finding that "more than 60% of the female workers self-reported occupation-related diseases" (Chen, 2016). The No More Deaths campaign in South Korea, which attempts to hold Samsung accountable for various employee's cancers, has also worked to expose the harmful conditions of these factories (Chen, 2016).

In the Guide to Greener Electronics, Greenpeace analyzed how 17 of the world's leading consumer electronic companies address their environmental impacts. It graded companies in three critical areas: energy (greenhouse gases), resource consumption (sustainability and recycled materials), and chemicals (toxic or hazardous in production and in product, and the resulting grades were disconcerting. Apple led the companies with a B-, with Google and Samsung remaining in the middle of the pack with a D+ and D- respectively, and Amazon failing with a F. "This hidden reality stands in stark contrast to the forward-thinking, environmentally conscious image and most IT companies project" (Greenpeace, 2017).

Considering that the average lifespans of electronics are still relatively low, with smartphones on the lower end at just over two years while PCs have five years, the cycle encourages billions of electronics to be made, sold, and disposed of each year (Greenpeace,

2017). However, does the cycle drive short-term profits that are too high a cost for our planet and our people?

Case: Apple

In May 2011, an explosion at an iPad factory in China killed two people immediately and injured over a dozen. In 2010, 137 workers, ordered to use poisonous chemicals to clean iPhone screens, were injured at an Apple supplier in eastern China. By the end of 2011, there had been two explosions at iPad factories. These are just some of the incidents that are instigated by the harsh working conditions cited in suppliers' factories, including excessive overtime, crowded dorms, under-age workers, falsified records, disregard for workers' health, and wages of $1.78 per hour, at least at Apple's largest supplier, Foxconn (Clarke, 2017). Many of these suppliers are also suppliers for companies like Dell, Hewlett-Packard, IBM, Lenovo, Sony and others. While Apple has required suppliers to stop using certain chemicals and follow a certain code of conduct, over half of the suppliers have violated an aspect of the code, or in some cases even violated the law. Among these, since 2007, fewer than fifteen have actually been terminated for their violations (Duhigg, 2012).

Like many of the companies discussed thus far, Apple is known by virtually everyone around the world—whether it is the famous logo of a bitten apple or the iPhone or the face of the company, Steve Jobs. The revered brand has become a trademark story for innovation, global manufacturing, and technology, allowing it to build one of the most valuable companies in the world. In fact, it became the world's most valuable brand in 2015 at $247 billion USD, and it reached a market capitalization of $700 billion, making it the first of any U.S. company (Clarke, 2017). Not only has it remained valuable, but the Apple brand has remained virtually

untarnished. In November 2012, the New York Times conducted a survey and 56% of respondents could not think of anything negative about Apple. Fourteen percent said the worst thing was that products were expensive, and only 2% mentioned overseas labor practices (Duhigg, 2012). How has the arguably most well-known company in the world protected its reputation?

One former Apple executive says, "We've known about labor abuses in some factories for four years, and they're still going on. Why? Because the system works for us. Suppliers would change everything tomorrow if Apple told them they didn't have another choice." Suppliers echo the same message, pushing the blame on Apple. As one supplier says, "You can set all the rules you want, but they're meaningless if you don't give suppliers enough profit to treat workers well" (Duhigg, 2012). An executive at a supplier company described the process to become one of Apple's many suppliers. He recalled how difficult it was, but even more so, that potential suppliers are subject to handing over all financial information. Apple then scrutinizes the financials before offering a carefully selected price with little profit margin. "The only way you make money working for Apple is figuring out how to do things more efficiently or cheaper. And then they'll come back the next year, and force a 10 percent price cut" (Duhigg, 2012). According to Ling Mingqi, who worked in management at Foxconn, "Apple never cared about anything other than increasing product quality and decreasing production cost" (Duhigg, 2012).

The iPhone's global supply chain involves 785 suppliers in 31 countries; however, 349 of the suppliers, almost 50%, are in China (Clarke, 2017). Foxconn, one of these Chinese suppliers and one of the few suppliers that can make enough iPhones and iPads, has been exposed for its working conditions that have resulted in so many suicide attempts that the company has installed over three million square meters of netting around the outside of its employee dormitories to

prevent future attempts. Originally, there was a program in development for a counseling and mental health hotline for Foxconn employees, but the company persistently delayed the program. The message sent to employees was always that they should "work hard on the job today or work hard to find a job tomorrow" (Duhigg, 2012). However, now that some of their employees have committed suicide, Foxconn is retroactively creating the hotline.

Foxconn is one of China's biggest employers, employing around 1.2 million workers, and China's largest exporter. Its employees assemble around 40% of all consumer electronics to Apple and other customers such as Amazon, Dell, Hewlett-Packard, Nintendo, and Samsung. Even with customers as prominent as these, Foxconn has not been held accountable, perhaps because it is one of the few companies capable of supplying these tech companies. Foxconn replied to allegations, saying "conditions...are anything but harsh," employees have "regular breaks," and it has a "very good safety record" (Duhigg, 2012). In fact, Foxconn claims that the company has "come a long way in [its] efforts to lead [the] industry in China in areas such as workplace conditions and the care and treatment of [its] employees" (Duhigg, 2012). One business social responsibility consultant points to Apple's responsibility in influencing its suppliers. "We could have saved lives, and we asked Apple to pressure Foxconn, but they wouldn't do it. Companies like H.P. and Intel and Nike push their suppliers. But Apple wants to keep an arm's length, and Foxconn is their most important manufacturer, so they refuse to push" (Duhigg, 2012).

Apple makes similar claims of recent improvements by pointing to its implementation of annual supplier responsibility reports and an auditing campaign with its supplier code of conduct. In 2011, the company conducted 229 audits of supplier facilities. At 93 of the facilities, they found at least half of the workers exceeding the 60 hour work week and working more than six

days per week. In the audits, they also found evidence of discrimination, improper safety precautions, and failure to pay overtime rates. Moreover, the pattern of incidents in recent years implies a lack of action. “If you see the same pattern of problems, year after year, that means the company’s ignoring the issue rather than solving it” (Duhigg, 2012). Even more concerning are the blatant moments of no action like in the explosion at a Chengdu plant. Two weeks before the explosion, a Hong Kong advocacy group published and sent Apple a report on the facility’s unsafe conditions and problems with aluminum dust. In 2003, an aluminum dust explosion in Indiana, U.S. destroyed a wheel factory. In 2008, agricultural dust in a sugar factory in Georgia, U.S. caused an explosion. Aluminum dust was known to cause explosions, and there was still no action from Apple. Seven months after the explosion in Chengdu, China another happened in Shanghai, China, also from aluminum dust. For a problem that is a relatively easy fix, solved by better ventilation, Apple failed to prevent these explosions (Duhigg, 2012).

For Apple, an unresolved tension is at the core: improve overseas’ working conditions or risk supplier relationships and fast delivery on new products—remember the iPhone X shortage after its release in November of 2017? According to Apple CEO Tim Cook though, ethical sourcing encompasses ‘‘... everything, from environmentally, to how you work with suppliers, with labor questions, to the carbon footprint of your products, to the things you choose to support, to the way you treat your employees’’ (Clarke, 2017). However, we are unsure if Cook will push Apple to implement changes in these areas. As one of the most admired companies, Apple has had few pressures for changes externally. Moreover, any external pressures, any “consciousness raising moments...through the work of civil society organizations have been effectively countered by Apple and Foxconn’s immense marketing efforts focused on the products themselves” (Clarke, 2017). Until consumers collectively demand better conditions,

like they did in the coffee and retail industries, there is little impetus for change. A current Apple executive sums it up best: "Right now, customers care more about a new iPhone than working conditions in China" (Duhigg, 2012).

Case: IBM

Ford Motor Company, Walmart, and Unilever have all partnered with International Business Machines Corporation (IBM) in the past year for supply chain sustainability solutions. For Ford, it was the notoriously problematic mining industry, specifically cobalt, which is used in electrical cars and other consumer devices, that brought it to IBM to pilot a blockchain solution in 2019 (Wolfson, 2019). Sourcing precious metals and minerals is often scrutinized for using child labor and exploiting their workers (Noto, 2018). With IBM's help, Ford, along with Huayou Cobalt, LG Chem, and RCS Global, is using blockchain to trace and validate ethically sourced minerals. Manish Chawla, general manager of the global industrial products industry for IBM recognizes their mission: "With the growing demand for cobalt, this group has come together with clear objectives to illustrate how blockchain can be used for greater assurance around social and environmental sustainability in the mining supply chain" (Wolfson, 2019). Chawla hopes that their work can become a precedent for the mining industry to ensure transparency around the materials going into our consumer goods. Blockchain allows a trail of data to be created, giving evidence of every step of the chain from the cobalt mine to the end manufacturer. This network opens the participants to auditing and transparent validation against responsible sourcing standards developed by the Organization for Economic Cooperation and Development (OECD) (Wolfson, 2019). IBM had already piloted a similar blockchain program for global food supply companies, Walmart, Unilever, and Kroger, in 2017. In 2018, IBM

worked with the diamond supply chain so that consumers could authenticate where, when, and how their diamonds were sourced (Noto, 2018). While IBM now uses its technical expertise to assist with ethical sourcing in other industries, it first began with establishing standards in its own industry, starting in 2004.

IBM, or "Big Blue" as its often called for its globally known logo, is a leading technology company producing a wide variety of hardware, technology service, and research solutions. Since its beginning in 1911, it has remained competitive and innovative, resulting in inventions such as the automated teller machine (ATM), hard disk drive, and SQL programing language. As early as 1971, IBM introduced a company environmental policy and a Green Sigma program (IBM, 2019). However in 2003 and 2004, IBM, Dell, Hewlett-Packard (HP), and five contract manufacturers were targeted in NGO reports for their environmental footprints and factory labor conditions (Code of Conduct 6.0, 2018). In October of 2003, there were over 200 toxic-chemical lawsuits against IBM, linking the company's manufacturing processes and materials to workers' cancers and other diseases (Flynn, 2003).

In response to criticism from the NGO reports and the media, IBM launched a set of supplier conduct principles in 2004 (Winston, 2010). This later helped IBM, Dell, HP, and the contract manufacturers to respond to critics together by creating the Electronic Industry Citizenship Coalition (EICC) and its Code of Conduct in October 2004 (Code of Conduct 6.0, 2018). The EICC, which has now been renamed the Responsible Business Alliance (RBA), seeks to build "a global electronics industry that creates sustainable value for workers, the environment and business" by "collaborat[ing] to improve working and environmental conditions through leading standards and practices" (Code of Conduct 6.0, 2018). In practice, this means that the Code of Conduct has five sections on labor, health and safety, environment, standards for

business ethics, and management systems, with standards that suppliers and member firms must meet (Code of Conduct 6.0, 2018). Now, over one hundred electronic goods, software, and services companies (including Apple, Dell, Foxconn, and Amazon) have endorsed an Electronic Industry Code of Conduct, establishing a standards-based approach to setting industry-wide objectives, measuring compliance, and understanding socially responsible practices (Code of Conduct 6.0, 2018; IBM, 2019). At IBM, the EICC Code of Conduct is "the single code with our supply base," requiring that suppliers must implement within one year and adjust as the code is reviewed and updated every three years (IBM, 2019). Along with adopting the EICC Code across all suppliers in 2013, IBM removed toxic chemicals from their semiconductors in 2010. Moreover, IBM required suppliers to disclose metrics and results, increasing transparency and visibility, and it "cascaded" requirements to "any suppliers that are material to IBM's products" (Winston, 2010). These elements were unique to IBM and helped the company estimate the entire value chain's impact without starting lengthy product life cycle analyses (Winston, 2010). It distinguished itself from other tech companies as Newsweek's 2011 Green Rankings, using a three part scoring system on environmental impact, management, and disclosure, named IBM the Greenest Company in America of the 500 largest U.S. companies (it was no longer in the Top 10 in 2018, while Apple was at #8) (Shen, 2011).

As a leader in the technology industry, IBM has also led in its sourcing practices. It spends over $3 billion a year with different suppliers, more than any other technology company, necessitating a first-mover strategy as the NGO response would have become increasingly damaging to its reputation (IBM, 2019). IBM also leads the technology industry in building solutions for better ethical sourcing practices in other industries. Just as it set standards in

electronics, IBM could be setting a standard for transparency and compliance in responsible sourcing practices with its blockchain solution in every other industry as well.

CHAPTER IV

FINDINGS FROM CASE STUDIES

From these six companies—Equal Exchange, Starbucks, Nike, Patagonia, Apple, and IBM—I have highlighted how large companies with diverse customer bases have transformed their supply chains by implementing impactful sustainability initiatives. While each journey was distinct, many commonalities exist. Among these commonalities are key success factors for diverse companies who are also looking to economically and feasibly implement ethical sourcing practices.

Key Success Factors

1. *Be transparent*

   Transparency might be the most important first step for any company implementing sustainability initiatives. How do you know your impact without visibility over what is happening? As customers have shown, they view company responsibility broadly, often holding the customer-facing company responsible for the entire supply chain. This means knowing what suppliers are doing and how they are doing it is more important than ever. However, a KPMG study in 2013 found that only 49% of companies have visibility beyond their first tier of suppliers. Only 9% of companies surveyed have complete visibility throughout their supply chains (Bregman, 2015). Transparency is difficult through every step in the supply chain because of high monitoring costs; however, Nike, Patagonia, and IBM have been particularly successful by involving others in their transparency solutions.

In 2004, Nike's Vice President of Corporate Responsibility, Hannah Jones, realized their passiveness in monitoring—they were reacting to major problems instead of preempting them. To solve this, she pushed for transparency of suppliers by publishing a complete list of Nike's factories. Critics and NGOs, who now know the suppliers, can essentially monitor and police for Nike, taking on most of the high monitoring costs, and Nike can address the actual problems (others have followed and also published a supplier list). More importantly, Jones wanted Nike to collaborate with other companies that used the same factories to coordinate inspections and common standards, therefore decreasing costs (Paine, 2016). Patagonia took on monitoring costs on its own after switching to organic cotton in 1996. The company, still relatively small especially compared to Nike, examined every step of the supply chain to assess working conditions and environmental impact (Patagonia, 2019). Vying for transparency while the company was small reduced costs of monitoring that would only increase as the company grew. IBM established transparency in its supply chain by adopting the Electronic Industry Citizenship Coalition (EICC) code across all suppliers and cascading the requirements to anyone supplying IBM products (Winstron, 2010). Now, it is using its technical expertise to build solutions for transparency in other industries. IBM's pioneering blockchain solution revolutionizes the auditing and validation process in supply chains; however, blockchain's high costs of development and implementation indicate that companies should work together in their industries to use the solution (just as Walmart, Unilever, and Kroger did with their pilot program) (Wolfson, 2019; Noto, 2018).

These companies have approached transparency in different ways, but each has strategically reduced their oversight costs—a major concern for most companies.

Following one of these examples is just one step to a viable and robust sustainability program, but it is a key step, as transparency enables discovering and fixing the problems.

2. *Establish industry standards*

One way these companies lowered costs in their supply chain transformations was by advocating for industry standards. These lower costs manifest in two ways—either the industry works together to establish standards, reducing individual costs as companies partner together and collaborate, or the industry establishes higher standards which require increased costs, but individual companies have more leeway to raise the customer's price, as everyone else is, too. Both cases would decrease costs, and if they happen together, companies can experience even more cost savings as they are developing industry standards. Equal Exchange, Nike, Patagonia, and IBM each took this approach.

Equal Exchange began as a Fair Trade specialty coffee company, actually using the Fair Trade label to establish standards in the coffee industry. While Equal Exchange is not the organization defining standards, it is taking these standards and applying them to different industries, starting first with coffee and extending to tea, cocoa, bananas and other produce.

Nike and Patagonia are approaching it differently, investing in innovative industry solutions that are often more affordable and perform better. Nike chose a minority investment in DyeCoo to use its waterless dyeing process as a proprietary asset rather than acquiring the start-up. Nike's investment leverages its innovative capabilities and leading industry position to commercialize the technology for widespread use across the

apparel industry (Paine, 2016). Likewise, Patagonia made an investment in a company, BST, that is developing new technologies and its own research lab, Blue Sky Innovation. Thus far, BST has introduced three different bio-based products also used by apparel companies, such as adidas, Nike, and Levi's. Patagonia's Blue Sky Innovation has invented an environmentally friendly wetsuit that has proved to have leading performance. Patagonia's goal is to "be first to market, but then open source innovation to the industry in order to amplify the environmental benefits" (O'Rourke, 2017). Nike and Patagonia's commitment to innovation is introducing new materials and production methods to the apparel industry—other leaders in different industries can do the same.

IBM led the high tech industry by creating the Electronic Industry Citizenship Coalition (EICC) in 2004, now renamed the Responsible Business Alliance (RBA). The organization "collaborat[es] to improve working and environmental conditions through leading standards and practices" (Code of Conduct 6.0, 2018). What started as a collaboration between less than ten companies is now over one hundred. They work on industry-specific issues to establish standards, decreasing their own costs and suppliers' costs.

As these companies have shown, industry partnerships seem vital to the success of sustainability programs. Together, companies can decrease costs, introduce innovative and sustainable technologies, and incentivize suppliers as they are enacting industry standards.

3. *Design a sustainable product*

Starting with the design of a sustainable product (longer life cycle, recyclable materials, non-toxic chemicals) changes the entire value chain. Most notably, Nike and

Patagonia have accomplished this in the apparel industry, but other industries can implement something similar.

Nike transformed its design values with the Considered Design ethos: a closed-loop manufacturing system that minimizes waste by using outputs as inputs. It developed scores using the Considered scale, so that Nike's designers can quickly and quantitatively (and hence, objectively) measure the environmental impact of their prospective designs (Paine, 2016). We saw Patagonia's conflict between making the best product and shortening product lifespan in its durable water repellent dilemma. In the end, Patagonia compromised while committing to research to find the best product with non-toxic chemicals and a long lifespan. It also has released multiple "Don't Buy This Jacket" ad campaigns (see *Figure 5*) and used clothing programs to emphasize product lifespan.

Figure 5: Patagonia's "Don't Buy This Jacket" Campaign

Source: Patagonia

Both of these companies have a design ethos that incorporates sustainability and helps designers quantitatively score for sustainability. For other industries, it may look different. For coffee, perhaps the focus should be on how coffee is consumed (straws, single-serve coffee pods, or plastic cups). For high tech, perhaps it's the raw materials in

hardware. If we apply sustainability to the very beginning—to the design process—and assist designers in objectively scoring, it will have significant impact on the resulting product and its supply chain.

4. *Educate your stakeholders*

Starting any transformation in an organization requires significant buy-in from all stakeholders. For companies looking to start sustainability programs, stakeholders include suppliers, customers, employees, and stockholders. In the business cases, we saw Starbucks, Patagonia, and Apple educating their stakeholders in order to receive significant commitment and follow through to their programs.

When you walk into a Starbucks, you immediately see signs saying "ethically sourced" or "community first" next to pictures of coffee beans and farmers. The experience is designed to educate the customer about coffee, including Starbucks' farmers first attitude. The company also educates farmers, sharing knowledge from their research labs that are sustainable and help reduce costs. Lastly, Starbucks educates its stockholders through its Global Social Impact Report that outlines progress and specific, measurable, and difficult goals. Apple approaches stockholders similarly, creating multiple reports including their Progress Report, Conflict Minerals Reports, and Efforts to Combat Human Trafficking and Slavery. The company also sets measurable and specific goals, such as the goal to use 100% renewable energy in Apple facilities (and has achieved it). Patagonia's education to its employees, where Chouinard taught lessons on the Patagonia philosophy, sparked their turnaround from the 1991 recession. It also teaches customers in its campaigns, such as donating all 2016 Black Friday sales ($10 million) to grassroots campaigns and its "Don't Buy This Jacket" campaign. Patagonia

also makes a concerted effort to tell customers exactly what is in the product, whether it's recycled water bottles or other materials, and if it was Fair Trade Certified sewn.

These are just some of the ways companies have educated stakeholders in the process of changing their supply chains. Each stakeholder is important to the value chain and requires convincing before implementing ethical sourcing initiatives. Education, for these companies, was the best method.

5. *Don't wait for a recession to assess your vision*

One similarity that seems odd at first, but in hindsight makes sense, is that most of these companies defined themselves in the midst of a struggle—an economic recession. When Starbucks' stock hit an all-time-low in the 2008 financial crisis, the company re-evaluated the business and found a clear vision "investing in coffee for the long term" (Goodejohn, 2017). In the same 2008 recession, Nike re-hauled company structure, reconstructing sustainability into the business (Paine, 2016). Patagonia, in the 1991 recession, defined the Patagonia philosophy that would save them from reduced credit line, layoffs, and unsustainable growth (Chouinard, 2016).

Each of these companies refocused on sustainability during a recession, most likely because financial crisis force companies to reevaluate how they are doing business. While evaluating, they realized they needed to change and focused on vision. Mike Brewer, VP of Global Sourcing and Manufacturing at Nike agrees, advising to "focus on what you're trying to do. Stay true to your mission so you can retain your competitive edge" (Blanchard, 2018). I'm not saying we should start a recession—if we even had the power to—but, if we find ourselves in a recession, take advantage of it to redefine company vision and enact change. Or start the change before the recession.

6. *It doesn't matter if you're reactive or proactive, just act*

Many companies have a common misconception that it is too late or are complacent (Yvon Chouinard's states combating complacency as Patagonia's biggest challenge). The supply chain is set; the consumers are happy with the product; the company is maintaining sustainable growth. However, from the cases, we see that companies can be either proactive or reactive in sustainable supply chains—one might just be easier than the other.

In Patagonia and Equal Exchange's cases, strong vision from their founders led them to proactively develop their sustainability programs. Patagonia's mission statement to be in "business to save our home planet," saved them in their 1991 crisis (Patagonia, 2019). The Patagonia philosophy, and continuing to make decisions using that philosophy, is the crux of their success, quadrupling their revenues in the last decade (Beer, 2018). More importantly, the flywheel they have carefully crafted has proved "to the rest of the business world that doing the right thing makes for good and profitable business," just as Chouinard hoped (Chouinard, 2016). Similarly, Equal Exchange's vision of "fairness to farmers" has underlined the company as it became a Fair Trade model capable of extending to various products. Both of these companies started with a vision and sustained the vision. For new companies, this is ideal. For mature companies, it is still possible—reevaluate the vision and act before consumers (or governments, stockholders, or NGOs) force you to.

While Patagonia and Equal Exchange were proactive, Starbucks, Nike, Apple, and IBM were forced to act. They responded to public criticism that was hurting their reputations, and oftentimes, even sales. Starbucks reacted to the 1999 Seattle protests,

Nike to 1990s sweatshop conditions, Apple to multiple 2011 reports on explosions and suicides at supplier factories, and IBM to 2003 and 2004 NGO reports on environmental impact and labor conditions (Cole, 2011; Paine, 2016; Clarke, 2017; Flynn, 2003). While not ideal, as they had to launch capital intensive public relations campaigns to mend their reputations in addition to actually fixing the supply chain problems, they were able to implement sustainability initiatives. Because they quickly acted, they were able to become industry leaders.

From these six companies, we learn that companies must act, either proactively or reactively, but, most importantly, they act. By acting, each of these companies has established a reputation for sustainability that is hard for other industry members to now retroactively build. If no one is calling you out right now, act. If someone is calling you out right now, act.

The six key success factors—transparency, standardization, product design, education, vision, and action—implemented by the business cases discussed helped the companies transform their supply chains. By focusing on these success factors first, other companies can emulate their ethical sourcing initiatives to achieve more sustainable sourcing.

Implications

For the Customer

As discussed in Chapter II, it seems that customers believe ethical sourcing is important, but their intentions are not translating into actions (or purchases). Consequently, companies cannot respond to a consumer trend that does not exist if customers are not purchasing

sustainably. After seeing the gap between customer surveys versus their purchases, it is important that the customer focuses on being a conscious consumer.

Conscious consumerism distinguishes itself from ethical consumerism, as a less daunting, more feasible pattern of consumption. As Thompson defined, ethical consumerism is the "philosophy that consumers will purchase or reject products based on their personal values" (Thompson, 2014). While this is an ideal, we have seen that it is not possible for customers to always purchase ethically. For example, a customer might recycle, minimize single plastic use, purchase Fair Trade coffee, but not drive an electric car. A customer may purchase socially-conscious and not environmentally-conscious. A customer may not have the resources to pay a premium, or perhaps there is no available ethical alternative (i.e., not many phone substitutes for iPhone or Samsung). Because of these factors, conscious consumption is a more practical way to vote with the dollar. It requires research, educating oneself on products, companies, and the various certification labels. Moreover, more and more new companies are making sustainable products more accessible, but require consumer awareness to grow. Instead of focusing on ethical consumerism, the shift towards conscious consumerism will increase information-sharing, customer awareness, and, hopefully, a consumer trend that companies can notice and respond to.

For the Company

Companies transforming supply chains using the key success factors found in the case studies have greater impact than they might think—they can change product design, industry standards, production methods, consumer purchasing patterns, regulation, and more. In practice,

it starts with responding to the consumer trend and taking one step at a time, which the business cases have shown is possible.

For companies who are not ready to change their entire supply chain strategy, they can consider introducing sustainable sourcing initiatives to one product line. During the product line extension, the company can assess performance and takeaways before deciding on expansion to other products. In addition, companies can obtain outside help from sustainability consultants or advisors to oversee transformations or hire and incentivize employees to manage new sustainability initiatives. Whether companies make small changes like these or use the key success factors, every company can impact the environment and society. The business cases have shown major programs that resulted in industry changes, but it took them many steps to get there. As Patagonia writes, "we can tell you how we came to realize our environmental and social responsibilities, and then began to act on them. Like other things in human life, it began with one step that led to another" (Patagonia, 2019).

Next Steps

After finding the key success factors among the six business cases, there are multiple steps to building a tested business sustainability framework. First, looking at more cases in different industries, and perhaps unique or untraditional companies, the success factors can be applied to a wider scope. By widening the scope, the success factors can be tested and refined before being organized into a structure or model. The sustainability model should then be tested by companies looking to transform their sourcing practices. Multiple companies from different industries would need to implement the framework and collect data on performance. These test

cases are vital to analyzing the success of the framework and would become a part of the iterative process to edit and refine the sustainability framework as more data is collected.

These next steps require a significant amount of resources for researchers, but would offer a solution to the changing business environment. As customers call for greater sustainability, companies will have to respond, and many of these companies will not know where to start. A framework, built from these success factors, enables companies to change faster and more effectively.

CONCLUSION

After finding that ethical sourcing is important to both customer or companies, the paper asked the question: how does a company with a diverse customer base economically and feasibly implement impactful ethical sourcing initiatives? I analyzed six business cases in three industries, Equal Exchange and Starbucks in the coffee industry, Nike and Patagonia in the apparel industry, and Apple and IBM in the high-tech industry. In noticing many similarities in the cases, I drew insights applicable to other companies across other industries by creating key success factors. Companies with a diverse customer base who want to implement impactful ethical sourcing initiatives economically should: be transparent, establish industry standards, design a sustainable product, educate stakeholders, assess vision, and act.

The findings show that customers have strong intentions that do not translate effectively into purchasing decisions. By becoming conscious consumers, we can incite customer trends that companies must respond to. The cases also show that companies can enact change, whether it is as all-encompassing as Patagonia's efforts or more focused like Apple's. Nonetheless, companies can use the resources they have to take small steps towards the success factors. Future research should focus on widening the scope of cases and building a sustainability framework for effective sustainability transformations.

WORKS CITED

Akhavan, Roya Manuela, and Markus Beckmann. (2017). "A Configuration of Sustainable Sourcing and Supply Management Strategies." *Journal of Purchasing and Supply Management* 23 (2): 137–51. https://doi.org/10.1016/j.pursup.2016.07.006.

Beer, J. (2018, March 15). How Patagonia Grows Every Time It Amplifies Its Social Mission. Retrieved from https://www.fastcompany.com/40525452/how-patagonia-grows-every-time-it-amplifies-its-social-mission

Blanchard, Dave. (2018). "CSCMP Edge 2018: How to Build a Future Supply Chain: Experts from Amazon, IBM and Nike Weigh in on How to Stay Ahead of the Supply Chain Game." *Material Handling & Logistics* 73 (6): 6–6.

Blowfield, M. (2000). Ethical Sourcing: A Contribution to Sustainability or a Diversion. *Sustainable Development,* 191-200.

Bregman, Robert, David Xiaosong Peng, and Wynne Chin. (2015). "The Effect of Controversial Global Sourcing Practices on the Ethical Judgments and Intentions of U.S. Consumers." *Journal of Operations Management* 36 (May): 229–43. https://doi.org/10.1016/j.jom.2015.01.001.

Bruce, H., & USA, T. (n.d). Starbucks hits milestone for ethical sourcing. *USA Today*.

Building a Vibrant Community. (2018). Retrieved from https://equalexchange.coop/

Cheek, Wanda K., and Cynthia Easterling Moore. (2003). "Apparel Sweatshops at Home and Abroad: Global and Ethical Issues." *Journal of Family & Consumer Sciences* 95, no. 1 (January 2003): 9–19.

Chen, Michelle. (2016). "High-Tech Manufacturing's Disposable Workers." January 13, 2016. https://www.thenation.com/article/high-tech-manufacturings-disposable-workers/.

Chen, Zhixiang and Svenja Andresen. (2014). "A Multiobjective Optimization Model of Production-Sourcing for Sustainable Supply Chain with Consideration of Social, Environmental, and Economic Factors." *Mathematical Problems in Engineering*, January, 1–11. https://doi.org/10.1155/2014/616107.

Chouinard, Y. (2016). *Let my people go surfing: The education of a reluctant businessman, including 10 more years of business unusual*. New York: Penguin Books.

Clarke, Thomas, and Martijn Boersma. (2017). "The Governance of Global Value Chains: Unresolved Human Rights, Environmental and Ethical Dilemmas in the Apple Supply Chain." *Journal of Business Ethics* 143 (1): 111–31. https://doi.org/10.1007/s10551-015-2781-3.

Code of Conduct 6.0. (2018). Retrieved from http://www.responsiblebusiness.org/code-of-conduct/

Coffee Prices - 45 Year Historical Chart. (2019). Retrieved from https://www.macrotrends.net/2535/coffee-prices-historical-chart-data

Cole, N. L. (2011). *"You're not just buying coffee": Ethical consumerism in the global age* (Order No. 3481957). Available from ProQuest Dissertations & Theses Global. (908553801).

Consumer-Goods' Brands That Demonstrate Commitment to Sustainability Outperform Those That Don't. (2015, December 10). Retrieved from https://www.nielsen.com/us/en/press-room/2015/consumer-goods-brands-that-demonstrate-commitment-to-sustainability-outperform.html

Corporate Social Responsibility. (2018). Retrieved from https://www.starbucks.com/responsibility

Duhigg, Charles, and David Barboza. (2012). "Apple's IPad and the Human Costs for Workers in China." *The New York Times*, January 25, 2012, sec. Business Day. https://www.nytimes.com/2012/01/26/business/ieconomy-apples-ipad-and-the-human-costs-for-workers-in-china.html.

Duncan, E. (n.d.). Topic: Fairly Traded Products Market in the United States. Retrieved from https://www.statista.com/topics/1173/us-fair-trade-market/

Flynn, Laurie J. (2003). "I.B.M. Toxic-Chemical Suit Heads to Court." *The New York Times*, October 13, 2003, sec. Business Day. https://www.nytimes.com/2003/10/13/business/ibm-toxic-chemical-suit-heads-to-court.html.

Goodejohn, K. (2017, September 28). Betting the farm on the farm | Future of Coffee. Retrieved from https://starbuckschannel.com/betting-the-farm-on-the-farm/

"Guide to Greener Electronics 2017." (2017). Greenpeace USA (blog). https://www.greenpeace.org/usa/reports/greener-electronics-2017/.

"IBM Global Procurement." (2019). OI700. http://www.ibm.com/link_label_1.html.

Irwin, J. (2015, January 12). Ethical Consumerism Isn't Dead, It Just Needs Better Marketing. Retrieved from https://hbr.org/2015/01/ethical-consumerism-isnt-dead-it-just-needs-better-marketing

Kahler, K. (2019, January 31). "How a Cow Becomes a Football." Retrieved from https://www.si.com/nfl/2019/01/31/how-cow-becomes-football-horween-wilson

Kenney, Andrew. (2018). "Patagonia: A Case Study in Managing a Mission." *Journal of Accountancy* 226 (1): 69–71.

Kim, S., Colicchia, C., & Menachof, D. (2016). Ethical Sourcing: An Analysis of the Literature and Implications for Future Research. *Journal of Business Ethics*. https://doi.org/10.1007/s10551-016-3266-8

Kirchhoff, C. (2007). Ethical consumerism. In M. Bevir (Ed.), *Encyclopedia of governance* (Vol. 2, pp. 285-285). Thousand Oaks, CA: SAGE Publications Ltd. doi:10.4135/9781412952613.n169

McLaughlin, Katy. (2004, February 17). "Is Your Grocery List Politically Correct?" *Wall Street Journal.*

Morgan, A. (Director). (2015). *The True Cost* [Video file]. USA: Life Is My Movie Entertainment. Retrieved from www.netflix.com

Noto, Anthony. (2018, April 26). "IBM, Berkshire Want Blockchain Tech to Ensure Ethical Jewel Sourcing." *New York Business Journal*. https://www.bizjournals.com/newyork/news/2018/04/26/ibm-berkshire-want-blockchain-for-jewel-sourcing.html.

O'Rourke, Dara, and Robert Strand. (2017). "Patagonia: DRIVING SUSTAINABLE INNOVATION BY EMBRACING TENSIONS." *California Management Review* 60 (1): 102–25. https://doi.org/10.1177/0008125617727748.

Paine, Lynn S., Nien-he Hsieh, and Lara Adamsons. (2016). Governance and Sustainability at Nike (A). *Harvard Business School* No. 9-313-143. Boston, MA: Harvard Business School Publishing.

Redden, K. R., & Beyer, G. W (1993). *Modern dictionary for the legal profession*. Buffalo, NY: W S. Hein.

Shen, Andrew. (2011, November 8). "How IBM Took Over As The Greenest Company In America." *Business Insider*. https://www.businessinsider.com/the-top-10-us-companies-green-rankings-2011-11.

Thompson, C. (2014). Ethical Consumerism as a Human Rights Enforcement Mechanism: The Coffee Cultivation Model. *Transnational Law & Contemporary Problems,24*(1), 161-192.

Vote Every Day. Vote B Corp. (2019). Retrieved from https://bcorporation.net/

Warrier, M. (Ed.). *The politics of fair trade: a survey*, 2011.

We're in business to save our home planet. (2019). Retrieved from https://www.patagonia.com/company-info.html

Whelan, R., & Wernau, J. (2018, December 19). Low Coffee-Bean Prices Brew Trouble for Farmers. Retrieved from https://www.wsj.com/articles/low-coffee-bean-prices-brew-trouble-for-farmers-11545228000

Why Get Certified. (n.d.). Retrieved from http://www.fairtradeamerica.org/for business//Why-Get-Certified

Winston, Andrew. (2010). "IBM's Green Supply Chain." *Harvard Business Review*, July 19, 2010. https://hbr.org/2010/07/ibms-green-supply-chain.

Wittenstein, J., & Gurman, M. (2018, November 13). "Apple Has a Plan B as IPhone Demand Peaks; Many Suppliers Don't." https://www.bloomberg.com/news/articles/2018-11-13/apple-has-a-plan-b-as-iphone-demand-peaks-many-suppliers-don-t.

Wolfson, Rachel. (2019). "Ford Motor Company Launches Blockchain Pilot On IBM Platform To Ensure Ethical Sourcing Of Cobalt." *Forbes*. https://www.forbes.com/sites/rachelwolfson/2019/01/16/ford-motor-company-launches-blockchain-pilot-on-ibm-platform-to-ensure-ethical-sourcing-of-cobalt/.

Wright, Chris F., and William Brown. (2013). "The Effectiveness of Socially Sustainable Sourcing Mechanisms: Assessing the Prospects of a New Form of Joint Regulation." *Industrial Relations Journal* 44 (1): 20–37. https://doi.org/10.1111/irj.12000.

Wright, Chris F. (2016). "Leveraging Reputational Risk: Sustainable Sourcing Campaigns for Improving Labour Standards in Production Networks." *Journal of Business Ethics* 137 (1): 195–210. https://doi.org/10.1007/s10551-015-2552-1.

Wright, Jessica, Steven Zeltmann, and Ken Griffin. (2017). "Coffee Shops and Cash Crops: Gritty Origins of the World's Favorite Beverage." *Competition Forum* 15, no. 1 (January 2017): 102–12.

Zakim, Michael. (1999). “A Ready-Made Business: The Birth of the Clothing Industry in America.” *Business History Review* 73 (1): 61. https://doi.org/10.2307/3116101.

Melissa S. Fu was born in Beaumont, TX on December 7, 1996, and moved to Katy, TX in 1999. She enrolled in the Business Honors and the Plan II Honors programs at the University of Texas at Austin in the fall of 2015 and studied at the Hong Kong University of Science and Technology in her junior year. She graduated in May 2019 and plans to begin her career in management consulting in the fall.